

WHAT IS CLAIMED IS:

1 1. A fluid level control system for use with a server having one or
2 more wells and a drain manifold fluidly communicating with an interior of each
3 of the one or more wells and not fluidly communicating with any other wells,
4 the system comprising:

5 a fill valve adapted to be coupled to the drain manifold external
6 the one or more wells and adapted to be coupled to a fluid source, wherein
7 the valve is movable between an open position in which fluid from the fluid
8 source is permitted to flow into the manifold and a closed position;

9 at least one sensor configured to identify a volume of fluid within
10 the interior of the one or more wells, wherein the fill valve moves between the
11 open position and the closed position based upon the identified volume of
12 fluid within the interior of the one or more wells.

1 2. The system of Claim 1, wherein the server includes a first
2 support structure supporting the one or more wells and wherein the system
3 includes a second support structure supporting the fill valve and the at least
4 one sensor as a unit distinct from the first support structure, wherein the
5 second support structure is adapted to be removably coupled to the first
6 support structure.

1 3. The system of Claim 1 including:
2 a processor coupled to the sensor and configured to generate
3 control signals based upon the identified volume of fluid; and
4 an actuator coupled to the fill valve, wherein the actuator
5 actuates the fill valve between the open position and the closed position in
6 response to the control signals from the processor.

1 4. The system of Claim 1 including an overflow conduit.

1 5. The system of Claim 1, wherein the at least one sensor is
2 configured to detect a level of fluid within the interior of the one or more wells.

1 6. The system of Claim 3, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than a preselected level,
3 wherein the fill valve is moved to the open position in response to the level of
4 fluid being less than the preselected level.

1 7. The system of Claim 6, wherein the preselected level is
2 adjustable.

1 8. The system of Claim 5, wherein the at least one sensor is
2 configured to detect when the level of fluid is greater than a preselected level,
3 wherein the fill valve is moved to the closed position in response to the level
4 of being greater than the preselected level.

1 9. The system of Claim 8, wherein the preselected level is
2 adjustable.

1 10. The system of Claim 3, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than the first preselected
3 level and when the level of fluid is greater than a second preselected level,
4 wherein the fill valve moves to the open position in response to the level of
5 fluid being less than the first preselected level and wherein the fill valve
6 moves to the closed position in response to the level of fluid being greater
7 than the second preselected level.

1 11. The system of Claim 10, wherein at least one of the first
2 preselected level and the second preselected level are adjustable.

1 12. A food serving station comprising:
2 a first support structure;
3 one or more wells supported by the first support structure;
4 a drain manifold fluidly coupled to each of the one or more wells
5 and not fluidly coupled to any other wells; and

6 an overflow conduit fluidly coupled to the drain manifold and
7 external to the one or more wells.

1 13. The station of Claim 12 including a fill valve fluidly coupled to the
2 drain manifold and adapted to be coupled to a fluid source, wherein the fill
3 valve is movable between an open position in which fluid from the fluid source
4 is permitted to flow into the manifold and a closed position.

1 14. The station of Claim 13 including at least one sensor configured
2 to identify a volume of fluid within the one or more wells, wherein the fill valve
3 moves between the open position and the closed position to a sensed volume
4 of fluid within the one or more wells.

1 15. The station of Claim 14 including:
2 a processor coupled to the at least one sensor and configured to
3 generate control signals based upon the identified volume of fluid within the
4 one or more wells; and
5 an actuator coupled to the fill valve, wherein the actuator moves
6 the fill valve between the open position and the closed position in response to
7 the control signals from the processor.

1 16. The station of Claim 14, wherein the at least one sensor is
2 external to the one or more wells.

1 17. The station of Claim 16 including a sensor in fluid
2 communication with an interior of the drain manifold, wherein the sensor is at
3 least partially within the sensor conduit.

1 18. The station of Claim 14, wherein the sensor is configured to
2 detect a level of fluid within the one or more wells.

1 19. The station of Claim 18, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than a preselected level,

3 wherein the fill valve is moved to the open position in response to the level of
4 fluid being less than the preselected level.

1 20. The station of Claim 19, wherein the preselected level is
2 adjustable.

1 21. The station of Claim 14, wherein the at least one sensor is
2 configured to detect when the level of fluid is greater than a preselected level,
3 wherein the fill valve is moved to the closed position in response to the level
4 of being greater than the preselected level.

1 22. The station of Claim 21, wherein the preselected level is
2 adjustable.

1 23. The station of Claim 14, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than the first preselected
3 level and when the level of fluid is greater than a second preselected level,
4 wherein the fill valve moves to the open position in response to the level of
5 fluid being less than the first preselected level and wherein the fill valve
6 moves to the closed position in response to the level of fluid being greater
7 than the second preselected level.

1 24. The station of Claim 23, wherein at least one of the first
2 preselected level and the second preselected level are adjustable.

1 25. The station of Claim 12 including at least one heat source
2 supported below the one or more wells and configured to heat fluid within the
3 one or more wells.

1 26. The station of Claim 12 including a processor configured to
2 calculate a volume of fluid within the one or more wells based upon a volume
3 of fluid supplied to the one or more wells from a fluid source and an amount of
4 fluid removed from the one or more wells.

1 27. The station of Claim 26, wherein the processor calculates the
2 amount of fluid removed from within the one or more wells based upon an
3 estimated or sensed rate of evaporation of the fluid.

1 28. The station of Claim 27 including:
2 at least one heat source supported below the one or more wells
3 and configured to heat the fluid within the one or more wells; and
4 a temperature sensor configured to sense the temperature of
5 the fluid within the one or more wells and/or heat emitted from the heat
6 source, wherein the processor is coupled to the temperature sensor.

1 29. A food serving station comprising:
2 a first support structure;
3 one or more wells supported by the first support structure;
4 a drain manifold fluidly coupled to each of the one or more wells
5 and not fluidly coupled to any other wells; and
6 a fill valve coupled to the drain manifold and external to the one
7 or more wells.

1 30. The station of Claim 29 including at least one sensor configured
2 to identify a volume of fluid within the one or more wells, wherein the fill valve
3 moves between the open position and the closed position to a sensed volume
4 of fluid within the one or more wells.

1 31. The station of Claim 30 including a sensor conduit in fluid
2 communication with an interior of the drain manifold, wherein the at least one
3 sensor is at least partially within the sensor conduit.

1 32. The station of Claim 30 including:
2 a processor coupled to the at least one sensor and configured to
3 generate control signals based upon the identified volume of fluid within the
4 one or more wells; and

5 an actuator coupled to the fill valve, wherein the actuator moves
6 the fill valve between the open position and the closed position in response to
7 the control signals from the processor.

1 33. The station of Claim 29, wherein the at least one sensor is
2 configured to detect a level of fluid within the one or more wells.

1 34. The station of Claim 30, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than a preselected level,
3 wherein the fill valve is moved to the open position in response to the level of
4 fluid being less than the preselected level.

1 35. The station of Claim 34, wherein the preselected level is
2 adjustable.

1 36. The station of Claim 30, wherein the at least one sensor is
2 configured to detect when the level of fluid is greater than a preselected level,
3 wherein the fill valve is moved to the closed position in response to the level
4 of being greater than the preselected level.

1 37. The station of Claim 36, wherein the preselected level is
2 adjustable.

1 38. The station of Claim 30, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than the first preselected
3 level and when the level of fluid is greater than a second preselected level,
4 wherein the fill valve moves to the open position in response to the level of
5 fluid being less than the first preselected level and wherein the fill valve
6 moves to the closed position in response to the level of fluid being greater
7 than the second preselected level.

1 39. The station of Claim 38, wherein at least one of the first
2 preselected level and the second preselected level are adjustable.

1 40. The station of Claim 29 including at least one heat source
2 supported below the one or more wells and configured to heat fluid within the
3 one or more wells.

1 41. The station of Claim 29, including at least one sensor configured
2 to identify a volume of fluid supplied to the one or more wells from a fluid
3 source, wherein the station further includes a processor configured to
4 calculate the volume of fluid within the one or more wells based upon the
5 identified volume of fluid supplied to the one or more wells from the fluid
6 source.

1 42. The station of Claim 41, wherein the processor calculates the
2 volume of fluid within the one or more wells additionally based upon an
3 estimated or sensed rate of evaporation of the fluid.

1 43. The station of Claim 42 including:
2 at least one heat source supported below the one or more wells
3 and configured to heat the fluid within the one or more wells; and
4 a temperature sensor configured to sense the temperature of
5 the fluid within the one or more wells and/or heat emitted from the heat
6 source, wherein the processor is coupled to the temperature sensor.

1 44. A food serving station comprising:
2 a first support structure;
3 one or more wells supported by the first support structure;
4 a drain manifold fluidly coupled to each of the one or more wells
5 and not fluidly coupled to any other wells;
6 a fill valve adapted to be coupled to a fluid source and
7 configured to supply fluid to the one or more wells, wherein the fill valve
8 moves between an open position in which fluid from the fluid source is
9 permitted to flow into the one or more wells and a closed position; and

10 at least one sensor fluidly coupled to the one or more wells and
11 external to the one or more wells, the at least one sensor being configured to
12 identify a volume of fluid within the one or more wells, wherein the fill valve
13 moves between the open position and the closed position based upon the
14 identified volume of fluid within the one or more wells.

1 45. The station of Claim 44, wherein the server includes a first
2 support structure supporting the one or more wells and wherein the system
3 includes a second support structure supporting the fill valve and the at least
4 one sensor as a unit distinct from the first support structure, wherein the
5 second support structure is adapted to be removably coupled to the first
6 support structure.

1 46. The station of Claim 44 including:
2 a processor coupled to the sensor and configured to generate
3 control signals based upon the identified volume of fluid; and
4 an actuator coupled to the fill valve, wherein the actuator
5 actuates the fill valve between the open position and the closed position in
6 response to the control signals from the processor.

1 47. The station of Claim 44 including:
2 a first support structure supporting the one or more wells; and
3 a second support structure supporting the fill valve and the at
4 least one sensor as a unit distinct from the first support structure, wherein the
5 second support structure is removably coupled to the first support structure.

1 48. The station of Claim 44, wherein the at least one sensor is
2 configured to detect a level of fluid within the interior of the one or more wells.

1 49. The station of Claim 48, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than a preselected level,
3 wherein the fill valve is moved to the open position in response to the level of
4 fluid being less than the preselected level.

1 50. The station of Claim 49, wherein the preselected level is
2 adjustable.

1 51. The station of Claim 44, wherein the at least one sensor is
2 configured to detect when the level of fluid is greater than a preselected level,
3 wherein the fill valve is moved to the closed position in response to the level
4 of being greater than the preselected level.

1 52. The station of Claim 51, wherein the preselected level is
2 adjustable.

1 53. The station of Claim 44, wherein the at least one sensor is
2 configured to detect when the level of fluid is less than the first preselected
3 level and when the level of fluid is greater than a second preselected level,
4 wherein the fill valve moves to the open position in response to the level of
5 fluid being less than the first preselected level and wherein the fill valve
6 moves to the closed position in response to the level of fluid being greater
7 than the second preselected level.

1 54. The station of Claim 53, wherein at least one of the first
2 preselected level and the second preselected level are adjustable.

1 55. The station of Claim 44 including at least one heat source
2 supported below the one or more wells and configured to heat fluid within the
3 one or more wells.

1 56. The station of Claim 44 including:
2 at least one sensor configured to identify a volume of fluid
3 supplied to the one or more wells from a fluid source; and
4 a processor configured to calculate the volume of fluid within the
5 one or more wells based upon the sensed volume of fluid supplied to the one
6 or more wells from the fluid source.

1 57. The station of Claim 56, wherein the processor calculates the
2 volume of fluid within the one or more wells additionally based upon an
3 estimated or sensed rate of evaporation of the fluid.

1 58. The station of Claim 57 including:
2 at least one heat source supported below the one or more wells
3 and configured to heat the fluid within the one or more wells; and
4 a temperature sensor configured to sense the temperature of
5 the fluid within the one or more wells and/or heat emitted from the heat
6 source, wherein the processor is coupled to the temperature sensor.

1 59. A food serving station comprising:
2 a support structure;
3 one or more wells having walls forming one or more interiors;
4 a drain outlet in fluid communication with the one or more
5 interiors;
6 an overflow outlet in fluid communication with the one or more
7 interiors; and
8 at least one sensor configured to identify a volume of fluid within
9 at least one of the one or more wells, wherein no greater than two of the drain
10 outlet, the overflow outlet and the at least one probe requires ports through
11 the walls.

1 60. A method for controlling a level of fluid contained within one or
2 more wells of a server having a drain manifold coupled to the one or more
3 wells and not coupled to any other wells, the method comprising:
4 determining a level of fluid within the one or more wells by
5 sensing a level of fluid external to the one or more wells; and
6 adjusting the level of fluid within the one or more wells based
7 upon the determined level of fluid external to the one or more wells.

1 61. A method for supplying fluid to an interior of one or more wells
2 having a drain manifold fluidly coupled to the one or more wells and a drain,
3 the method comprising:
4 blocking fluid flow from a drain manifold into the drain; and
5 supplying fluid into the drain manifold at a location external to
6 the one or more wells.